

**AMENDMENTS TO THE CLAIMS****Listing of Claims**

Claim 1 (previously presented): A method for utilizing an optical disc drive to manage data on an optical disc, the optical disc comprising a defect table and a plurality of data blocks for recording data, each of the data blocks having a corresponding unique address, the defect table comprising at least one entry, each of the entries being used to record the address of a corresponding defective data block on the optical disc, and the optical disc drive comprising a memory, the memory comprising a plurality of memory areas, each of the memory areas being utilized to store one of the entries, wherein when the optical disc drive writes data onto the optical disc, the optical disc drive is capable of detecting the defective data blocks of the optical disc, the method comprising:

allocating at least one first memory area in the memory, and storing a

corresponding entry of the defect table in each of the first memory areas;

storing the address of a first data block of the optical disc in an original second memory area of the memory before data is written in the first data block if the first data block is defective and if there is at least one address, which is greater than the address of the first data block, recorded in the defect table, wherein the second memory area is different from the first memory area; and

during a data write-in operation, preserving an initial order of the first memory areas in the memory when the address of the first data block is stored into the second memory area.

Claim 2 (previously presented): The method of claim 1 wherein when the address of the first data block is stored in the second memory area, a number of times needed to modify the entries stored in the first memory areas is less than a number of entries in the defect table having addresses greater than the address of the first data block.

Claim 3 (original): The method of claim 1 further comprising: storing the address of a second data block of the optical disc in another second memory area when the second data block is defective.

5 Claim 4 (original): The method of claim 3 further comprising: restoring the address of the first data block in another second memory area and releasing the original second memory area if the address of the second data block is less than the address of the first data block.

10 Claim 5 (currently amended): The method of claim 1 further comprising:  
[[When]] when the optical disc drive stops writing data onto the optical disc,  
storing an address stored in a first memory area into another memory area  
of the memory if the address of the first data block stored in the second  
memory area is less than the address stored in the first memory area.

15

Claim 6 (currently amended): The method of claim 1 further comprising: updating  
the defect table according to the addresses stored in the first memory areas and  
the second memory area, and writing the updated defect table in the optical disc  
[[before]] when the optical disc drive stops writing data onto the optical disc.

20

Claim 7 (original): The method of claim 1 wherein the data blocks and the defect  
table are established according to a specification of CD-MRW (Compact Disc -  
Mount Rainier reWritable).

25 Claim 8 (original): The method of claim 1 wherein the optical disc further comprises  
a plurality of spare data blocks for recording data, which are prepared for the  
defective data areas, each of the spare data blocks has a corresponding address,  
and each of the entries of the defect table is also used to record the address of a  
corresponding spare data block.

30

Claim 9 (previously presented): A method for using an optical disc drive to manage  
data on an optical disc, the optical disc comprising a defect table and a plurality

of data blocks for recording data, each of the data blocks having a  
corresponding unique address, the defect table comprising at least one entry,  
each of the entries being used to record the address of a corresponding defective  
data block on the optical disc, and the optical disc drive comprising a memory,  
5 the memory comprising a first memory area and a second memory area capable  
of storing a plurality of the entries, wherein when the optical disc drive writes  
data onto the optical disc, the optical disc drive is capable of detecting the  
defective data blocks of the optical disc, the method comprising:  
storing the defect table in the first memory area;  
10 storing the address of a first data block in the second memory area before data is  
written in the first data block if the first data block is defective;  
storing the address of a second data block in the second memory area and  
sorting the addresses both of the first data block and the second data block  
if the second data block is defective; and  
15 when the optical disc drive stops writing data onto the optical disc, sorting the  
addresses both of the first data block and the second data block according  
to the sorting order of the defect table stored in the first memory area, and  
updating the defect table according to the sorted address stored in the  
memory.

20

Claim 10 (original): The method of claim 9 wherein the data blocks and the defect  
table are established according to a specification of CD-MRW (Compact Disc -  
Mount Rainier reWritable).

25

Claim 11 (previously presented): A method for using an optical disc drive to manage  
data on an optical disc, the optical disc comprising a defect table and a plurality  
of data blocks for recording data, each of the data blocks having a  
corresponding unique address, the defect table at least recording the address of a  
corresponding defective data block on the optical disc, and the optical disc drive  
30 comprising a memory having a first memory area and a second memory area,  
wherein when the optical disc drive writes data onto the optical disc, the optical  
disc drive is capable of detecting the defective data blocks of the optical disc,

the method comprising:

storing the defect table in the first memory area;

storing the addresses of the defective data blocks, which are detected by the  
optical disc drive while the optical disc drive writes data onto the optical  
disc, in the second memory area, and sorting the addresses stored in the  
second memory area; and

when the optical disc drive stops writing data onto the optical disc, combining  
the addresses of the defect table stored in the first memory area with the  
addresses stored in the second memory area so as to update the defect  
table, and writing the updated defect table in the optical disc.

Claim 12 (original): The method of claim 11 wherein the data blocks and the defect  
table are established according to a specification of CD-MRW (Compact Disc -  
Mount Rainier reWritable).

Claim 13 (new): A method for utilizing an optical disc drive to manage data on an  
optical disc, the optical disc comprising a defect table, a plurality of data blocks  
for recording data and a plurality of spare blocks, each of the data blocks and the  
spare blocks having a corresponding unique address, the defect table comprising  
a plurality of entries, each of the entries being utilized to record the address of a  
corresponding defective data block on the optical disc or being set as a defective  
entry corresponding a defective spare block on the optical disc, the optical disc  
drive comprising a memory having a plurality of memory areas, wherein when  
the optical disc drive writes data onto the optical disc, the optical disc drive is  
capable of detecting defective data blocks of the optical disc, the method  
comprising:

allocating at least one first entry in a first memory area of the memory, and  
storing a corresponding entry of the defect table in each of the first entry  
in the first memory area;

storing the address of a specific data block of the optical disc in a second entry  
of a second memory area of the memory before data is written into the  
specific data block if the specific data block is found defective and if

there is at least one address, which is greater than the address of the specific data block, recorded in the defect table, wherein the second memory area is different from the first memory area;

5 during a data write-in operation, if a spare block assigned to store data originally to be written in the specific data block is found defective, setting the second entry storing the address of a specific data block as a defective entry, and then storing the second entry to the first memory area without performing a sorting operation.

10